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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,255	07/18/2003	Kent D. Cdola	MSI-403USC1	3271

22801 7590 01/25/2007  
LEE & HAYES PLLC  
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SPOKANE, WA 99201

EXAMINER
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HASSAN, AURANGZEB

ART UNIT	PAPER NUMBER
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2182

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	01/25/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 01/25/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

lhptoms@leehayes.com

**Office Action Summary**

Application No.

10/622,255

Applicant(s)

CEDOLA, KENT D.

Examiner

Aurangzeb Hassan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3,4,20-22 and 30-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,20-22 and 30-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Double Patenting*

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1, 3, 4, 20 – 22 and 30 – 42 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 – 27 of U.S.

Patent No. 6,625,669 in view of Grimbale et al. (US Patent Number 5,241,536). Claims 1 – 27 of Patent No. 6,625,669 discloses all the elements, a port associated with an infrared transceiver, a port detector, a port renaming module and a list (system registry, claim 1) comprising of descriptive names and display (user interface, claim 5), of the identified claims of the instant application. Grimbale teaches elements not present in the claims of the parent application, "busy" or "available for use" status indicator as seen in column 7 lines 27 - 35. One of ordinary skill would be motivated to make such

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modifications in order to enhance handling of a multi-port system (column 2, lines 18 – 35).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1, 3, 4, and 20 – 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Belt et al. (US Patent Number 6,029,213 hereinafter "Belt") in view of Feagans (US Patent Number 6,360,281) further in view of Grimble et al (US Patent Number 5,241,536 hereinafter "Grimble").

5. As per claims 1, 20 and 41, Belt teaches a computer system (notebook computer 226, figure 2c) which can be implemented in a set-top box (projector 238, figure 2c, transmitting video data to a display, column 3, lines 44 – 54) method comprising:

a port detector to create a list of virtual port names of existing communication ports in the computer system (port detection scans and internally lists all IR and available ports in system, column 4, lines 1 – 32) and to determine whether each communication port is either available for use or busy;

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a system registry that contains configuration parameters of the computer system (operating system contains system registry, figure 4, element 502);

communication ports associated with an infrared transceiver (1<sup>st</sup> and 2<sup>nd</sup> IR ports, 230 and 234, figure 2c);

Belt does not teach a port renaming module and a display to present the list.

Feagans analogously teaches a system having:

a port renaming module (Control Panel of Windows 95, column 7, lines 60 – 67) to:

check the system registry to identify one or more communication ports (COMx, COM1, COM2, etc, column 7, lines 60 – 67) associated with one or more infrared transceivers;

rename each communication port ("Sportster", column 7, lines 60 – 67) associated with an infrared transceiver from a corresponding virtual port name to a different virtual port name (user has full selective capability to configure virtual names, column 7, lines 60 – 67);

display the list of virtual port names updated with the different virtual port names (updates in Control Panel are displayed on the interface connected, column 7, lines 60 – 67, column 8, lines 1 – 5); and

display a status indicator associated with each different virtual port name indicating whether the corresponding communication port (updates in Control Panel are displayed on the interface connected, column 7, lines 60 – 67, column 8, lines 1 – 5).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify Belt with the teachings of Feagans. One of ordinary skill in the art would have been motivated to make such modification in order to retrieve status information without interrupting data communications and allow for real-time information availability to be viewed in a user-friendly interface on demand (column 1, lines 64 – 67, column 2, lines 1 – 3).

The combination of Feagans and Belt does not explicitly disclose an indicator showing whether a port is available for use or busy.

Grimble teaches a status indicator (status indicator 80, figure 6) associated with a communication port showing whether a port is available for use (port available for use, column 7, lines 27 – 30) or busy (port busy, column 7, lines 30 – 33).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to realize that communication port status is evident in Feagans and Belt and further explained by Grimble. One of ordinary skill would be motivated to make such modifications in order to enhance handling of a multi-port system (column 2, lines 18 – 35).

The Examiner makes note the one of ordinary skill in the art at the time of the applicant's invention would have access to the pertinent NPL prior art made of the record along with the complete Windows Operating System, System Messages to better understand that a system registry is included in an operating system and how operating system messages are taught by the operating system along with available, busy and

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error signals all communication ports handled (see cited NPL regarding registry and messages and applicant is directed to operating system messages included in Microsoft Windows for communication port handling).

6. As per claims 3 and 21, Belt teaches a computer system and set-top box implemented method wherein the port detector cycles through the communication ports (scanning program, column 4, lines 1 – 5) and attempts to open the communication ports (searches for an external signal, column 4, lines 11 – 22), the port detector using results from the attempts to determine whether each communication ports exists and whether each communication port is available (availability as in signal present, column 4, lines 1 – 32).

Grimble teaches whether each communication port is available for use (port available for use, column 7, lines 27 – 30) or busy (port busy, column 7, lines 30 – 33).

It would have been obvious for one of ordinary skill in the art to modify Belt and Feagans with Grimble for the reasons shown above in claim 1.

7. Belt modified by the teachings of Feagans as applied in claims 1 and 20 above, as per claims 4 and 22, Belt teaches a computer system and set-top box implemented method wherein the port detector checks a software driver associated with an infrared transceiver to identify a communication port associated with the infrared transceiver (operating system communicates with an IR device driver 510, figure 4, which begins to communication with one of the IR transceiver, column 4, lines 41 - 55).

8. Belt modified by the teachings of Feagans as applied in claims 1 and 20 above, as per claims 30 and 36, Feagans teaches a computer system and set-top box implemented method wherein the port detector uses an operating system message returned upon each attempt to open a communication port to determine whether the corresponding communication port exists (command status information on ports provided, column 3, lines 25 – 40).

9. Belt modified by the teachings of Feagans further in view of Grimble as applied in claims 1 and 20 above, as per claims 31 and 37, Grimble teaches a computer system and set-top box implemented method wherein a message indicating no error or a message indicating access denied determines that the communication port exists (exists and port available for use, column 7, lines 27 – 30).

10. Belt modified by the teachings of Feagans further in view of Grimble as applied in claims 1 and 20 above, as per claim 32, Grimble teaches a computer system wherein the port detector uses an operating system message returned upon the attempt to open a communication port to determine whether the communication port is available for use (port available for use, column 7, lines 27 – 30) or busy (port busy, column 7, lines 30 – 33).



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11. Belt modified by the teachings of Feagans as applied in claims 1 and 20 above, as per claims 33 and 38, Feagans teaches a computer system and set-top box implemented method wherein a no error message (CMD\_BLK\_ERROR\_STATUS, column 5, lines 54 – 60, error messages inclusive) indicates that the communication port is available for use and an access denied message indicated that the communication port is busy (operating system includes access denied messages and shown accordingly in command status in figure 1 and updates in Control Panel are displayed on the interface connected, column 7, lines 60 – 67, column 8, lines 1 – 5).

12. Belt modified by the teachings of Feagans as applied in claims 1 and 20 above, as per claims 34 and 39, Feagans teaches a computer system and set-top box implemented method wherein when the port detector detects a status change of one of the communication ports associated with an infrared transceiver, the port renaming module changes the displayed status indicator associated with the communication port that has the status change (updates in Control Panel are displayed on the interface connected, column 7, lines 60 – 67, column 8, lines 1 – 5).

13. Belt modified by the teachings of Feagans further modified by Grimble as applied in claims 1 and 20 above, as per claims 35, 40 and 42, Grimble teaches a system and set-top box implemented method wherein when the communication port becomes available for use the port renaming module changes the status indicator from busy to available for use and when the communication port becomes busy the port renaming

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module changes the status indicator from available for use to busy (status indicator changes from available to busy accordingly, column 7, lines 27 – 36).

### ***Response to Arguments***

14. Applicant's arguments with respect to claims 1, 3, 4, 20 – 22 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aurangzeb Hassan whose telephone number is (571)


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272-8625. The examiner can normally be reached on Monday - Friday 9 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AH

  
KIM HUYNH  
SUPERVISORY PATENT EXAMINER

1/22/06